Development of an Evaluation Strategy for Education Programs of the South Slough National Estuarine Research Reserve

Hypothesis/Objectives

Education programs offered by the South Slough National Estuarine Research Reserve (South Slough NERR) and the Friends of South Slough are diverse and offered to a wide variety of audiences. Located on the southern Oregon coast near Coos Bay, over 5,000 acres of protected lands and waterways are protected by the State of Oregon. Adjacent to an outstanding interpretive facility housing a classroom, exhibits, an auditorium, and a gift shop provide ample opportunities for field-based educational experiences. Education programs have been offered by South Slough NERR since 1984. To date, no comprehensive evaluation strategy for these programs has been developed and measures of audience impacts are varied and lack cohesiveness.

This project seeks to identify appropriate tools and an overall strategy to employ those tools in measuring the effectiveness of the Reserve’s educational efforts. Specifically, the staff would like to understand the impact of two elements of the education activities at South Slough NERR, the formal K-12 student offerings and the public interpretive programs. Multiple challenges exist in constructing a fixed set of evaluation tools that can be employed in consistently to yield meaningful results. These stem from the wide variety of offerings and the lack of identified consistency in learning objectives for programs offered. A significant body of quantitative data is available and program designs including specific learning objectives exist for most programs. However, staff lacks sufficient time to review and synthesize this data into a comprehensive source that can be used to inform the development of an evaluation strategy.

An intern is sought to assist the South Slough NERR education program coordinator in the gathering, synthesis and interpretation of quantitative and qualitative data that will be used to develop an evaluation strategy. A survey of existing and potential data collection tools is a fundamental component of the project. Additionally, the intern will occasionally assist in delivery of interpretive and formal education programs to explore use of potential evaluation mechanisms.

The project will also be informed by results of recent market analysis and needs assessment work conducted by South Slough NERR in 2011-2012. The results of these studies will be available and will be used in combination with the evaluation strategy to inform the education elements of the South Slough NERR management plan.

Work products anticipated from this project include:

- A draft evaluation strategy report for review by the South Slough NERR Education Advisory Group;
- Specific evaluation tools identified for use with various formal and interpretive programs offered by the reserve;
- A synthesis describing existing and needed data sources for future evaluation efforts at South Slough NERR.
**Academic Status:** Undergraduate

**Areas of discipline:** Environmental Science Studies; Information Technology; Science Policy/Science and Society; Science Teacher Education; Marine and Aquatic Sciences; Education

**Internship Location:** City: Charleston  
State: Oregon

**Tasks**

The evaluation intern will assist the South Slough NERR education coordinator with the following tasks:

1. Inventory and categorization of existing education program opportunities;
2. Collection and synthesis of existing quantitative education program data sources;
3. Collection and synthesis of existing qualitative education program evaluation tools;
4. Collection and synthesis of existing qualitative education program evaluation data;
5. Participation and assistance in field-based education programs to collect qualitative and quantitative data;
6. Identification of existing and potential evaluation tools including assessment of feasibility of use with South Slough NERR education and interpretive programs;
7. Development of draft evaluation strategy.

The intern will be responsible for exploring all existing and potential sources of education program data through the use of written and digital sources. This work may include interviews with staff, participants, and students. Additional work will include literature reviews and identification of similar environmental education programs with successful evaluation strategies and effective evaluation tools.

Occasional participation in field-based education programs is expected and will contribute to the interns understanding of the South Slough NERR and the requirements of the project.

**Special skills or training required**

A combination of office and field-based skills are required for this internship.

**Necessary skills include:**

1. manipulation of data sets;
2. use of word processing and spreadsheet software;
3. collaboration;
4. independent judgment and critical thinking;
5. assessment and critical review of various data sources and information to identify important elements for inclusion in strategy;
6. comfort working with a team of educators;
7. comfort interacting with public audiences of children and adults;
8. hiking on maintain trails;
9. work on public docks near water;
10. paddling on waterways in kayaks and/or canoes (some training provided);
11. observant listening and note taking;
12. written and oral presentation.

These skills are required and will be modeled and taught by South Slough NERR education staff when necessary and to the degree feasible during the internship.

**Expected Outcomes:**

The student will gain an understanding of the South Slough NERR and the delivery of well-planned educational programming for various audiences seeking to further their understanding of the estuary and its watershed. Participation in the development of the proposed evaluation is anticipated to expand the intern’s understanding of means used to measure the effectiveness of education programs. The student will also learn how to develop a strategy based on existing data and resources that compliments and supports the administration of an education program. Finally, the intern will learn about the various habitats protected by the South Slough NERR and the methods used to convey key messages to target audiences.

**Guidance/Supervision:**

The student will work closely with Tom Gaskill, South Slough NERR education program coordinator, in outlining the evaluation strategy, accessing pertinent data, and defining the scope and scale of the project. Occasionally, the intern will also work with other education staff and volunteers in delivering and evaluating field-based educational programs.

Guidance is also provided in written form through background materials and examples from comparable education programs.

**Co-Mentor’s Information:**

Tom Gaskill

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